

Remarks

Status of Claims

Claims 73-76, 78-82, and 93-96 are pending in the application. Claims 73, 76, 79 and 95 have been amended. Claim 96 has been cancelled without prejudice or disclaimer.

Claim Amendments

Claim 73 has been amended to recite that the semi-solid ion reservoir buffer comprises a Zwitter ion and an amine selected from (Bis(2-hydroxyethyl)-imino-tris(hydroxymethyl)-methane) (Bis-Tris) or amino methyl propanol.

Claim 76 has been amended to present alternative limitation language.

Claim 79 has been amended to present alternative limitation language and to amend the list of buffers.

Claim 95 has been amended to incorporate the limitations of claim 96 which had been cancelled without prejudice or disclaimer.

Applicants respectfully assert that no new matter has been introduced by way of these claim amendments.

Claim Rejection

35 U.S.C §103

Cabilly et al. (WO 97/41070)

In the Office Action, mailed September 7, 2006, claims 73-76, 78-82 and 93-95 were rejected under 35 U.S.C §103(a) for allegedly being unpatentable over Cabilly *et al.* (WO 97/41070).

Regarding claim 73, the Office Action asserts that Cabilly *et al.* discloses an electrophoresis apparatus and methods for its use, “comprising: a body of separating gel (Figure 21, gel 518); a cathode electrically coupled to a first end of the gel (Figure 21, cathode 326); an anode comprising an electrochemically ionizable metal (Figure 21, anode 324; Page 23, lines 12-17), said anode being disposed in a semi-solid ion reservoir containing a buffer (Figure 21-anode 324 is partially covered by matrix 320; Page 25, lines 1-13-gel immersed in buffer solution can be characterized as “semi-sold”), said

semi-solid ion reservoir being disposed at a second end of the gel body (Figure 21) and electrically coupled to the gel body, said ion reservoir and buffer being configured for retarding the migration of ions of the electrochemically ionizable metal in the gel body during electrophoresis (Page 8, lines 19-21; Page 12, lines 22-36; Page 23, lines 12-17)". See Office Action page 3-4. The Office Action also asserts that Cabilly et al. disclose the use of a buffer comprising tris and glycine, which are an amine and a Zwitterion, respectively

Without conceding to the arguments made in the Office Action, and to expedite allowance of the present case, Applicants have amended independent claim 73, from which the other claims included in this rejection depend, to incorporate a that the amine of the semi-solid ion reservoir buffer is selected from (Bis(2-hydroxyethyl)-imino-tris(hydroxymethyl)-methane) (Bis-Tris) or amino methyl propanol. The Applicants respectfully assert that Cabilly *et. al.* do not disclose an electrophoresis apparatus with semi-solid ion reservoir buffer comprising an amine selected from (Bis(2-hydroxyethyl)-imino-tris(hydroxymethyl)-methane) (Bis-Tris) or amino methyl propanol. Therefore, in view of Cabilly et al. it would not have been obvious to one of ordinary skill in the art to use such amine. Accordingly, Applicant respectfully requests withdrawal of the rejection of claims 73-76, 78-82 and 93-95 under 35 USC §103(a) as being unpatentable over Cabilly *et. al.* (WO 97/41070).

Cabilly et al. (WO 97/41070) in view of Slater et al. (U.S. Patent No. 6,146,511), van Holst et al. (Plant Physiol., (1986) 80, 786-789) and "Pro-Pure Proteomics Grade Brochure, 2000

In the Office Action, mailed September 7, 2006, claim 96 was rejected under 35 U.S.C §103(a) for allegedly being unpatentable over Cabilly *et al.* (WO 97/41070).

Applicants have cancelled claim 96, and therefore the rejection is rendered moot. However, it is noteworthy that none of the references cited disclose an electrophoresis apparatus having an anode disposed in a semi-solid ion reservoir containing a buffer, wherein the buffer comprises a Zwitter ion and an amine selected from (Bis(2-hydroxyethyl)-imino-tris(hydroxymethyl)-methane) (Bis-Tris) or amino methyl propanol. Accordingly, the Applicant respectfully requests withdrawal of the rejection of claim 96

under 35 USC §103(a) as being unpatentable over Cabilly *et al.* (WO 97/41070) in view of Slater *et al.* (U.S. Patent No. 6,146,511), van Holst *et al.* (Plant Physiol., (1986) 80, 786-789) and “Pro-Pure Proteomics Grade Brochure, 2000.

Conclusion

In view of the amendments to the claims Applicants respectfully submit that all of the pending claims are in condition for allowance. Therefore, Applicants respectfully request withdrawal of each rejection and allowance of the present application.

This response is accompanied by a Request for Continued Examination with a fee of \$790.00, and a Petition for Extension of Time of Two (2) Months with a fee of \$450.00. It is believed that a total of \$1240.00 in fees is due. It is not believed that any further fees or extensions of time are necessary in connection with this paper. However, the Patent Office is authorized to deduct any fees required for this submission from, or deposit any overpayment into, the Deposit Account No. 503994. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided below.

Respectfully submitted,

Date June 7, 2006 /Daniel E. Raymond, Reg. # 53,504/
Daniel E. Raymond

Invitrogen Corp.
1600 Faraday Ave.
Carlsbad, CA 92008
(760) 268-7498